

EMJAYCO

11120
P. O. BOX ~~11120~~ • OAKLAND, CALIFORNIA 94611

February 17, 1983

RECEIVED
FEB 22 1983
DIVISION OF OIL & GAS
BAKERSFIELD

Division of Oil & Gas
4800 Stockdale Highway, Suite 417
Bakersfield, California 93309

Attn: David Mitchell & Hal Bopp

Re: Kern Bluff Water Injection
USL - VP 1

Gentlemen:

In answer to your letter of January 24, 1983, we herewith provide you with certain materials to assist in the appeal that your office may be making in the matter of the E.P.A. tentative ruling prohibiting injection of oil well water.

You will remember that I originally proposed the oil well water be injected into the zone from which it was produced. Gulf objected and all parties (Gulf, the D.O.G., U.S.G.S. and Water Quality) approved the present method, that of injecting into the upper Kern River series sands. Any other method required of us to change our injection would create a severe economic hardship. The lease is at best now marginally economic. There really is no alternative; we've gotten rid of our old sumps as a result of other environmental rulings.

The most important fact, however, and the one that everyone seems to overlook is that the produced oil well water is of better quality than the water we produce from our domestic water well nearby. We are injecting into an upper dry zone of the Kern River series; it has no water in it, it is not an aquifer!

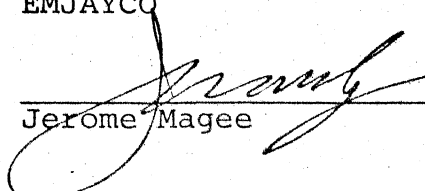
We drilled the water well for domestic purposes in the NW $\frac{1}{4}$ of Section 12 and it wasn't until we reached the depth of well below 400 feet that we had any appreciable water zones. The well is T.D.'d at 610 feet. A water analysis is enclosed marked "Water Well", File #870, B.C. Laboratory.

Our injection in V.P. #1 takes place as you know between 200 and 350 feet. We inject between 3,000 and 4,000 b/w/p/d. An analysis of this water (enclosed File #871) which clearly shows that it is of substantially better quality than that of our domestic supply well.

For E.P.A. to claim that our injecting into the Kern River presents "a clear and present hazard to a probable drinking water source" is invalid. This tentative ruling must be set aside some way. Please keep me informed.

Very truly yours,

EMJAYCO


Jerome Magee

JM:rw
Encls.

CERTIFIED MAIL
#P13 9951285

FEB 22 1983

DIVISION OF OIL & GAS
BAKERSFIELDSTRUCTURE
ANALYSIS
PETROLEUM

LABORATORIES, INC.

4100 PIERCE ROAD, 93308

BAKERSFIELD, CALIFORNIA 93308

PHONE 327-4911

Submitted By: Emjayco
P. O. Box 11073
Oakland, California 94611

Date Reported: 2/10/83
Date Received: 1/24/83
Laboratory No.: 870

Marked: U.S.L. - V.P. Lease Water sample from water well for drinking 1/24/83

WATER ANALYSIS

Constituents, Parts/million

Boron (B)	0.20
Calcium (Ca)	88.
Magnesium (Mg)	3.2
Sodium (Na)	213.
Potassium (K)	6.5
Carbonate (CO ₃)	0.
Bicarbonate (HCO ₃)	57.2
Chloride (Cl)	146.2
Sulfate (SO ₄)	430.
Nitrate (NO ₃)	16.0
Fluoride (F)	
Iron (Fe)	0.22
Manganese (Mn)	0.01
Copper (Cu)	
Zinc (Zn)	
Aluminum (Al)	(-) 0.1
Silica (SiO ₂)	6.
Phosphate (PO ₄)	
Total Hardness as CaCO ₃	233.3. (13.6 gr/gal)
Total Dissolved Solids	966.
Oil (Freon extraction)	
pH	7.8
E.C., Micromhos/cm, (Kx10 ⁶) @ 25°C	1360.
Resistivity, Ohm M ² /M	

(-) refers to "less than".

B C LABORATORIES, INC.

BY

J. J. Eglin
J. J. Eglin

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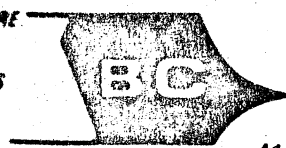
DIVISION OF OIL & GAS
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AGRICULTURE

ANALYSIS

PETROLEUM



LABORATORIES, INC.

4100 PIERCE ROAD, 93308

BAKERSFIELD, CALIFORNIA 93308

Submitted By: Emjayco
P. O. Box 11073
Oakland, California 94611

Date Reported: 2/10/83
Date Received: 1/24/83
Laboratory No.: 871

Marked: U.S.L. - V.P. Lease Water sample from oil wells wash tank 1/24/83

WATER ANALYSIS

Constituents, Parts/million

Boron (B)	0.64	
Calcium (Ca)	20.	
Magnesium (Mg)	1.8	
Sodium (Na)	212.	
Potassium (K)	6.5	
Carbonate (CO ₃)	0.	
Bicarbonate (HCO ₃)	292.8	
Chloride (Cl)	207.4	
Sulfate (SO ₄)	(-) 5.	
Nitrate (NO ₃)	(-) 0.4	
Fluoride (F)		
Iron (Fe)	0.23	
Manganese (Mn)	0.04	
Copper (Cu)		
Zinc (Zn)		
Aluminum (Al)	(-) 0.1	
Silica (SiO ₂)	33.	
Phosphate (PO ₄)		
Total Hardness as CaCO ₃	57.4	(3.4 gr/gal)
Total Dissolved Solids	776.	
Oil (Freon extraction)		
pH	7.8	
E.C., Micromhos/cm, (Kx10 ⁶) @ 25°C	1050.	
Resistivity, Ohm M ² /M		

(-) refers to "less than".

B C LABORATORIES, INC.

BY J. J. Eglin
J. J. Eglin

Injected water better
than formation water

Dry water TDS = 776
(low in sulfate) less than 5705
Lease water well = 966
(high in sulfate) (430 TDS)